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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,143	02/27/2004	Jeffrey A. Tilton	25363A	9278

22889 7590 09/13/2006

OWENS CORNING  
2790 COLUMBUS ROAD  
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EXAMINER

PIZIALI, ANDREW T

ART UNIT PAPER NUMBER

1771

DATE MAILED: 09/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/789,143

Applicant(s)

TILTON ET AL.

Examiner

Andrew T. Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The amendment filed on 8/15/2006 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 9-15, 19-22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,616,408 to Oleszczuk et al. (hereinafter referred to as Oleszczuk), or USPN 5,804,512 to Lickfield et al. (hereinafter referred to as Lickfield), in view of USPN 6,022,818 to Welch et al. (hereinafter referred to as Welch).

Regarding claims 1-5, 9-15, 19-22 and 24, Oleszczuk and Lickfield each disclose an article comprising a first supporting layer of wet processed mat (14), a meltblown thermoplastic fiber layer (12), and a second supporting layer of wet processed mat (16), wherein said first and/or second layer comprises thermoplastic polymer staple fibers and thermoplastic bicomponent fibers (see entire documents including the paragraph bridging columns 11 and 12 of Oleszczuk and column 9, lines 12-20 of Lickfield). Oleszczuk and Lickfield each disclose that the layers of the article may be directly thermally bonded (see column 8, lines 55-63 of Oleszczuk and column 4, lines 59-67 of Lickfield).

Oleszczuk and Lickfield each disclose that additional "supporting" (wet processed bicomponent staple fiber mat) layers may be added to the article (see column 8, lines 64-67 and

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the paragraph bridging columns 12 and 13 of Oleszczuk and column 5, lines 1-4 and column 10, lines 10-23 of Lickfield), but the references do not appear to specifically mention at least one adjacent additional layer of different fiber formulation. Welchel discloses that it is known in the nonwoven laminate fabric art (column 1, lines 11-20) to directly bond an additional thermoplastic bicomponent staple nonwoven layer (105) with a different fiber formulation (smaller denier) to an adjacent thermoplastic bicomponent staple nonwoven layer (102), so that the surface is more aesthetically pleasing to the touch and more comfortable to the user (see entire document including Figure 2, column 2, lines 17-18, column 5, lines 35-65, and column 7, lines 4-20). It would have been obvious to one having ordinary skill in the art at the time the invention was made to directly bond an additional wet processed bicomponent staple fiber mat supporting layer, with a different fiber formulation (smaller denier), to the first or second layer of wet processed mat (14 or 16), because the additional wet processed bicomponent staple fiber mat supporting layer would allow the surface be more aesthetically pleasing to the touch and more comfortable to the user.

Regarding claims 3 and 15, Oleszczuk and Lickfield each disclose that the fibers may be polyester, polyethylene, and/or PET (see column 8, lines 22-54 and column 12, lines 43-56 of Oleszczuk and column 3, lines 55-67 and column 10, lines 1-9 of Lickfield).

Regarding claims 4, 5 and 13, Oleszczuk and Lickfield each disclose that the layers may be thermally bonded (see column 8, lines 55-63 of Oleszczuk and column 4, lines 59-67 of Lickfield). It is noted that Welchel also discloses that the thermoplastic bicomponent staple fiber nonwoven layers (105 and 102) are to be directly bonded (45-48).

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Regarding claims 9 and 19, Oleszczuk and Lickfield each disclose that the outer layer may be hydrophilic (see column 12, lines 31-43 of Oleszczuk and column 4, lines 1-17 of Lickfield).

Regarding claims 10 and 20, Oleszczuk and Lickfield each disclose that the outer layer may be flame retardant (heat resistant) (see column 12, lines 31-43 of Oleszczuk and column 9, lines 52-63 of Lickfield).

Regarding claims 11 and 21, Oleszczuk and Lickfield each disclose that the fibers may comprise polyethylene(column 8, lines 22-54 of Oleszczuk and column 3, line 55 through column 4, line 17 of Lickfield), which is inherently hydrophobic.

Regarding claims 12 and 22, Oleszczuk and Lickfield each disclose that the fibers may include natural fibers such as cotton or wool (see column 8, lines 37-54 of Oleszczuk and column 4, lines 1-17 of Lickfield), which are inherently sound absorbent.

Regarding claim 24, the first and second layers have different fiber compositions because one layer is composed of fibers with a small diameter while the other layer is composed of fibers with a larger diameter. In addition, Oleszczuk and Lickfield each disclose that at least one of the outer webs may be treated with a treatment agent to render any one of a number of desired properties to the fabric (column 12, lines 31-43 of Oleszczuk and column 4, lines 1-17 of Lickfield). Therefore, the first and second layers would have different fiber compositions because the outer layer would be composed of fibers comprising a treatment agent while the inner layer would be composed of fibers not comprising a treatment agent.

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4. Claims 6-8 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,616,408 to Oleszczuk, or USPN 5,804,512 to Lickfield, in view of USPN 6,022,818 to Welchel as applied to claims 1-5, 9-15, 19-22 and 24 above, and further in view of USPN 4,813,948 to Insley.

Oleszczuk and Lickfield are each silent with regards to specific layer thicknesses, therefore, it would have been necessary and thus obvious to look to the prior art for conventional thicknesses. Insley provides this conventional teaching showing that it is known in the nonwoven barrier fabric art to use layer thicknesses ranging from 0.02 to 4 cm (see entire document including column 3, lines 43-62 and column 11, lines 39-51). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the layers with a thickness ranging from 0.02 to 4 cm, motivated by the expectation of successfully practicing the invention of Oleszczuk and/or Lickfield.

5. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,616,408 to Oleszczuk, or USPN 5,804,512 to Lickfield, in view of USPN 6,022,818 to Welchel as applied to claims 1-5, 9-15, 19-22 and 24 above, and further in view of any one of USPN 6,548,431 to Bansal et al. (hereinafter referred to as Bansal) or USPN 4,508,113 to Malaney.

Oleszczuk and Lickfield each disclose that the fibers may be bicomponent fibers comprising a polyethylene sheath (see column 12, lines 44-56 of Oleszczuk and column 10, lines 1-9 of Lickfield), but Oleszczuk and Lickfield are each silent with regards to a specific bonding temperature. Therefore, it would have been necessary and thus obvious to look to the prior art for conventional bonding temperatures. Bansal and Malaney each provide this conventional teaching showing that it is known in the art to use a bonding temperature within a range of about

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100 to about 150C (about 200 to 300F) when bonding polyethylene (see entire documents including column 8, lines 22-38 of Malaney and column 14, lines 37-52 of Bansal). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply heat at a temperature range of 200 to 300F, motivated by the expectation of successfully practicing the invention of Oleszczuk and/or Lickfield.

***Response to Arguments***

6. Applicant's arguments filed 8/15/2006 have been fully considered but they are not persuasive.

The applicant asserts that there is no teaching or suggestion to provide directly bonded layers of wet processed mat with different fiber formulations. The examiner respectfully disagrees. Oleszczuk and Lickfield each disclose that additional "supporting" (wet processed bicomponent staple fiber mat) layers may be added to the composite article (see column 8, lines 64-67 and the paragraph bridging columns 12 and 13 of Oleszczuk and column 5, lines 1-4 and column 10, lines 10-23 of Lickfield), but the references do not appear to specifically mention at least one adjacent additional layer of different fiber formulation. Welchel discloses that it is known in the nonwoven laminate fabric art (column 1, lines 11-20) to directly bond an additional thermoplastic bicomponent staple nonwoven layer (105) with a different fiber formulation (smaller denier) to an adjacent thermoplastic bicomponent staple nonwoven layer (102), so that the surface is more aesthetically pleasing to the touch and/or more comfortable to the user (see entire document including Figure 2, column 2, lines 17-18, column 5, lines 35-65, and column 7, lines 4-20). It would have been obvious to one having ordinary skill in the art at the time the invention was made to directly bond an additional wet processed bicomponent staple fiber mat

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supporting layer, with a different fiber formulation (smaller denier), to the first or second layer of wet processed mat (14 or 16), because the additional wet processed bicomponent staple fiber mat supporting layer would allow the surface be more aesthetically pleasing to the touch and more comfortable to the user.

The applicant asserts that the “second top sheet” (105) of Welchel is not wet processed or directly bonded to another wet processed layer. The examiner contends that it is not necessary to rely on Welchel to teach the wet processing of the layers because Oleszczuk and Lickfield already disclose that additional “supporting” (wet processed mat) layers may be added to the composite article (see column 8, lines 64-67 and the paragraph bridging columns 12 and 13 of Oleszczuk and column 5, lines 1-4 and column 10, lines 10-23 of Lickfield). It is noted that Oleszczuk and Lickfield each disclose that the layers may be thermally bonded (see column 8, lines 55-63 of Oleszczuk and column 4, lines 59-67 of Lickfield) and that Welchel also discloses that the thermoplastic bicomponent staple fiber nonwoven layers (105 and 102) are to be directly bonded (45-48). It is also noted that the applicant has not shown, or attempted to show, that all wet processing steps result in a mat that is patentably distinct from a mat that is not wet processed.

Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show obvious difference between the



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claimed product and the prior art product. *In re Marosi*, 218 USPQ 289 (Fed. Cir. 1983). The applied prior art either anticipated or strongly suggested the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with the applied prior art.

Regarding claim 24, the first and second layers have different fiber compositions because one layer is composed of fibers with a small diameter while the other layer is composed of fibers with a larger diameter. In addition, Oleszczuk and Lickfield each disclose that at least one of the outer webs may be treated with a treatment agent to render any one of a number of desired properties to the fabric (column 12, lines 31-43 of Oleszczuk and column 4, lines 1-17 of Lickfield). Therefore, the first and second layers would have different fiber compositions because the outer layer would be composed of fibers comprising a treatment agent while the inner layer would be composed of fibers not comprising a treatment agent.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground of rejection (rejection of claim 24) presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

atp

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ANDREW T. PIZIALI  
PATENT EXAMINER